CEDAR CITY, OPERATIONS

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June 14, 1978

Mr. Brian W. Buck
Department of Natural Resources
Div. of Oil, Gas, and Mining
1588 West North Temple
Salt Lake City, Utah 84116



Dear Mr. Buck:

In response to your letter dated June 7, 1978, the following information outlines the commitments of Utah International Inc., Cedar City Operations, to the following provisions of Rule M-10 of the General Rules and Regulations of the Utah Mined Land Reclamation Act of 1975. Wherever possible specific reference is made to the material previously submitted in Utah International's Mining and Reclamation Plan.

- LAND USE Referring to page 10 of the Mining and Reclamation Plan, Utah International's reclamation program is based upon a post mining land use of grazing.
- PUBLIC SAFETY AND WELFARE All present operations involve surface mining activities and, therefore, Subpart (a) of Rule M-10 pertaining to the closing of shafts and tunnels does not apply.

Subpart (b) pertaining to the disposal of trash and the final disposition of surface facilities was addressed on page 26 of the application under post mining activities.

Subpart (c) on plugging of drill holes. A commitment to plug drill holes was outlined in a "Letter of Intent To Do Assessment Work" dated July 19, 1977, which was submitted to, and subsequently approved by, the Department of Natural Resources. This letter provided that "in conjunction with any and all exploratory drilling, Utah International agrees to plug said holes in such a manner as to prevent migration of water, oil, gas, or other substances. Additionally, any exploration holes larger than 2-1/2" will be sealed at the surface, and all ground disturbances resulting from exploration activities such as access roads, cuts and fills, will be reclaimed using acceptable procedures." These procedures will continue to be followed as part of the Mining and Reclamation Plan.

Subpart (d), Warning Signs. The company is presently utilizing, and will continue to provide adequate warning signs wherever public access to operations is readily available.

- With respect to subpart (e), pertaining to the construction of berms around abandoned mine workings, a commitment to accomplish this was outlined on page 25 of the Mining and Reclamation Plan.
- IMPOUNDMENTS A summary of drainage control measures for impoundment systems and regraded areas is found on pages 25, 27, and 28, of the Mining and Reclamation Plan.
- SLOPES Regrading standards and maximum slope angles for waste piles and dumps are covered on pages 24, 25, 27, and 28, of the Mining and Reclamation Plan.
- HIGHWALLS With reference to the reclamation standard pertaining to the reduction of pit wall slopes, the operator hereby petitions that a variance be granted permitting the abandonment of certain pit areas without requiring any form of slope reduction. This petition is based upon a situation in which such slope reductions would necessitate excessive disturbances to surrounding undisturbed topography and would pose significant economic problems. As a preventative measure to restrict access into these areas berms will be constructed around pit highwalls.
- Rule M-2 (k) of the regulations become present as a result of mining operations then appropriate measures would be undertaken to satisfactorily control any solid, liquid, or gaseous toxic emissions. Such measures would fully reflect any standards as promolgated by the Department of Natural Resources. To date no such toxicity problems have been encountered.
- ROADS AND PADS The proposed reclamation program for roads and pads is outlined on page 23 of the Mining and Reclamation Plan. Additionally as part of the reclamation program for abandoned road cuts, suitable procedures will be implemented to restore surface drainage through these areas.
- DRAINAGES Even though it is true that mining operations do, in some areas, intersect minor natural drainages, the amount of surface water flow through these drainages is quite limited and very sporadic, only occurring during periods of unusually heavy rainfall. Consequently ongoing problems of drainage control are virtually nonexistent. Therefore, the company petitions that a variance be granted permitting mining operations to alter natural drainage channels. In cases where future operations could pose significant drainage problems, appropriate remedial measures would be undertaken to minimize erosional problems and to maintain manageable drainage patterns. Further more, upon abandonment of mine workings efforts will be undertaken to either restore drainage systems to their premine condition or else initiate suitable alternative drainage networks.

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- STRUCTURES AND EQUIPMENT The method of disposition of surface. facilities is discussed on page 26 of the Mining and Reclamation Plan under the section dealing with post mining activities.
- SHAFTS AND PORTALS As previously indicated no shafts and/or portals have or will be developed in conjunction with the operations covered by this application.

With respect to any trenches and shallow pits covered by this application, appropriate measures shall be taken to cover these areas upon abandonment.

- SEDIMENT CONTROL As outlined in the Mining and Reclamation Plan, sediment control measures shall consist of regrading and seeding procedures supplemented, where necessary, by drainage control/diversion systems.
- The section of a manifest with the property of the section of the property of REVEGETATION - Revegetation procedures for Utah International's Cedar City Operations are discussed on pages 25, 26, 29, 30, and 31, of the Mining and Reclamation Plan.
- DAMS The primary impoundment system associated with mining operations is a tailings pond. Reclamation procedures for this structure are covered on page 25 of the Mining and Reclamation Plan.
- SOILS All existing mine operations were initiated prior to the adoption of Rule M-10 of the General Rules and Regulations. At that time, no attempt was made to stockpile surficial materials for later redistribution upon the completion of mining activities. Subsequent experimentation utilizing a regraded waste dump was accomplished where part of the dump face was covered with a layer of fill material prior to seeding. A comparison of vegetative establishment on dump slopes with and without loose fill material has shown that this material did not significantly improve vegetative recovery. Therefore, it is not expected that much emphasis will be placed upon the utilization of surficial material on regraded areas. Also, any future utilization will be contingent upon the availability of sufficient surficial material of adequate quality to effectively support vegetative growth.

It should be noted that Utah International expects to amend its Mining Plan in the near future to encompass two additional mine areas. An absence of complete information prevents us from including them within the present plan. Reclamation programs and mining practices for these new areas will be consistent with the material previously submitted in the Mining and Reclamation Plan.

Sincerely

R. L. Bruno

Engineer

Jones, Manager

Reviewed and Approved By:

RLB:sf